REMARKS

Claims 1-15 and 20 remain pending. No claim has been allowed.

Claims 1 and 15 are rejected as being unpatentable over *Brotman* (5,917,890) in view of *Meador* (5,638,425) and newly-cited *Brotman* (5,917,889). For the reasons set forth below, the applicant respectfully traverses this rejection.

The rejection acknowledges that *Brotman '890* in view of *Meador* do not specifically teach the request of additional input in order to determine the correct character, in a method of improving alphabetic speech recognition as embodied in Claims 1 and 20. However, *Brotman '889* is cited as supplying the teachings missing from *Brotman '890* in view of *Meador*. The following discussion shows that *Brotman '889* does not supply the missing elements found in the rejected claims, and is in fact inconsistent with teachings in *Brotman '890*.

Brotman '889

In *Brotman* '889, the user first enters a sequence of telephone keys producing a DTMF string corresponding to alphabetic characters to be input to the system (Column 4, Lines 16-20). Alternatively, the user may *utter the numbers of the telephone key sequence* (Column 4, Lines 29-31). *Brotman* '889 thus requires entering a DTMF string (either by manually pressing telephone keys or by speaking the *numbers* corresponding to those keys) to initiate voice recognition.

Once *Brotman '889* receives a number string (DTMF or spoken), that system creates a grammar for limited recognition (Column 4, Lines 36-38). *Brotman '889* then prompts the user to speak the alpha characters comprising the numeric string previously entered (Column 4, Lines 60-62). Based on those numeric and spoken-alpha inputs, *Brotman '889* next generates a string of selected alphabetic characters which best matches the numeric string entered by the user (Column 5, Lines 1-3). The reference uses those inputs, including the spoken characters, to determine character likelihood for predicting the characters intended by the DTMF or spoken numeric input (Column 5,

Lines 31-35). Based on that processing, *Brotman '889* generates a string of selected alphabetic characters that are considered good candidates for matching the DTMF/spoken numeric input (Column 5, Lines 44-47).

Brotman '889 next asks the user whether that generated string corresponds to the intended string (Column 5, Lines 47-48). If the user agrees, string capture is complete (Column 5, Lines 60-64).

However, if a generated string does not match the intended string, then *Brotman '889* determines whether there are any likely strings not yet presented to the user (Column 5, Line 65-Column 6, Line 2). If no likely strings remain, then *Brotman '889* prompts the user to enter the string again (Column 6, Lines 2-5), in effect inviting a do-over of the preceding process.

However, if *Brotman '889* determines that there *are* likely strings which have not yet been presented to the user, then the system selects the next most-likely generated string and presents this string to the user (Column 6, Lines 7-10).

Claim 1

With the method embodied in Claim 1, the user first speaks alphabetic character input comprising plural alphabetic characters. That spoken alphabetic character input passes through a speech recognition engine, querying the user to verify that the recognized alphabetic character input is the same as the first spoken alphabetic character input received from the user.

If the recognized alphabetic character input is not the same as the first spoken alphabetic character input from the user, the method receives from the user a DTMF input for each of the first spoken alphabetic characters previously received from the user. If more than one alphabetic character associated with the DTMF input sounds like the first spoken alphabetic input from the user, the method receives a second spoken input of the alphabetic character from the user. This second spoken alphabetic character input is compared to each of the more than one alphabetic character strings associated with the DTMF input from the user. If the second spoken alphabetic character input from the user

matches one of those plural alphabetic character strings associated with the DTMF input, the method designates the alphabetic character string associated with the DTMF input that matches the second spoken character input received from the user.

***Brotman '889* vs. Claim 1**

The method of Claim 1 receives a first spoken alphabetic character input, instead of the initial DTMF (or spoken numbers) input of *Brotman '889*. If the user verifies that the recognized character input is the same as the spoken character input, no further action is required.

If the recognized character input is not the same as the first spoken input, only then does the method receive a DTMF input from the user. The method then determines whether an alphabetic character string associated with the DTMF input sounds like the user's first spoken alphabetic input. If the claimed method determines that more than one alphabetic character input is associated with the DTMF input, then the method receives a second spoken input of the alphabetic character from the user. If that second spoken character input matches one of the plural character strings associated with the DTMF input, that matched second spoken input is designated as a correct alphabetic character.

Claim 1 thus embodies a method in which DTMF input is obtained only if an alphabetic character match is not initially obtained, instead of constituting the first and numeric input from the user as in *Brotman '889*. Furthermore, Claim 1 calls for a second spoken alphabetic character input only where more than one character string (determined from the first spoken input) is associated with the DTMF input. In that situation, Claim 1 calls for the second spoken alphabetic input as recited in that claim.

Brotman '889, in contrast with Claim 1, requires a DTMF numerical sequence (either key entry or spoken numbers) as initial input. Although *Brotman '889* then receives spoken alphabetic characters for comparison with a string generated from the DTMF input, that reference does not call for a second spoken input; if no likely string matches the intended string, *Brotman '889* invites the user to try again (Column 6, lines 5-6), or selects the next most-likely string for presenting to the user. *Brotman '889* does not prompt the user for a second spoken input for disambiguating the generated string.

For those reasons, *Brotman '889* fails to supply the elements missing from *Brotman '890* in view of *Meador*.

The applicant also respectfully submits that the teachings of *Brotman '889* are inconsistent with those found in *Brotman '890*. *Brotman '889*, as pointed out above, starts with a DTMF numerical input corresponding to a text string. *Brotman '890*, however, prompts a user to utter an alphabetic character (410 at Fig. 3) at the start. It seems unlikely that one of ordinary skill, faced with those mutually-inconsistent teachings, would revert to DTMF input as taught by Brotman '889 and then attempt to integrate that teaching with the elements of *Brotman '890* and *Meador* as the rejection suggests. For this additional reason, the applicant submits that a method as embodied in Claim 1 would not have been obvious to one of ordinary skill over the cited art.

Likewise, a system as embodied in Claim 20 would not have been obvious to one of ordinary skill, from those applied references.

Claims 2-14 are rejected as being unpatentable over *Brotman '890* in view of *Meador* and *Brotman '889*, and further in view of *Hartley* (6,910,012). However, those claims all depend from Claim 1 and are deemed patentable over the art applied to that parent claim. *Hartley* does not overcome the above-noted deficiencies of that art and was not cited for that purpose. Accordingly, the applicant submits that Claims 2-14 are patentable over the applied art.

Claim 20 is rejected as being unpatentable over *Brotman '890* in view of *Meador* and *Hartley*, and in view of *Brotman '899*. The applicant respectfully traverses this rejection for the reasons discussed above with respect to Claim 1. Namely, *Brotman '899* fails to supply the elements of Claim 20 missing from the other applied references.

The foregoing is submitted as a complete response to the Office Action identified above. The applicant respectfully solicits a notice of allowance to all claims remaining in this application.

Respectfully submitted,
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